

Amendment Under 37 C.F.R. § 1.111
USSN 09/883,131
Attorney Docket Q71763

A1 In preferred embodiments, as shown in Fig 1 to 4, the padlock includes a body 15, including a casing 16 having a short recess 17 extending into the casing from a first end surface 19 to receive the short shackle leg 2 and a longer recess 18 extending into the casing from the first end surface 19 to receive the longer shackle leg 3, and a transverse recess 20 in the vicinity of the first end surface 19 commencing at a first side surface 21 of the body and intersecting the deep and short bore and in the region of the short bore having a constriction 22 of reduced cross-section so the first locking ball 23 described below, cannot pass from transverse recess 20 into the short recess 17. Preferably the axis of the transverse recess 20 orthogonally intersects the axes of the short and deep recesses 17 and 18 which are preferably parallel and substantially cylindrical and in practice formed by a rotating cutter tool advance from the surface and into the padlock casing.

The padlock is configured such in a locked configuration, the short leg 2 including the first locking recess 6 is within the short recess 17 and the longer leg 3 including the second locking recess 7 is within the longer recess 18 and additionally, the locking recesses 6 and 7 are aligned with the transverse recess 20. Preferably, in the locked configuration, the deepest point of the second locking recess 14 is substantially co-axial with the axis of the cross-recess.--

Page 12, amend the third full paragraph to read as follows:

A2 -- The casing is defined by a first end surface 19 referred to above, an opposed second end surface 29, a first side surface 21 referred to above, an opposed second side surface 30, a front surface (not shown) and back surface 32.--

Page 14, amend the paragraph bridging pages 14 and 15 to read as follows:

A13
-- The cam torsion spring 47, surrounding the drive portion 42 of the cam is located axially disposed from the barrel and having a moveable end 60 held in one of the drive recesses to abut a portion of the associated drive shoulder and a fixed end 61 projecting into the offset recess to abut a portion of the offset recess wall. It is configured to bias the cam away from the unlocked configuration and towards the locked configuration. Alternatively, the end 60 comprises a spring return which extends a short distance in a direction parallel to the axis of the cam to mate in a recess commencing at the floor of a drive recess and extending towards the first end surface.--

Page 15, amend the fourth full paragraph to read as follows:

A14
--The annular member 63 has two opposed substantially radially inwardly projecting wedges 65 and 66, (also called herein fingers 65 and 66 respectively), that are located one in each drive recess 48 and 49 respectively and an outwardly projecting stop 66A that protrudes into the offset recess. The cam and stop are configured such that when the cam is in the locked configuration, as shown in Fig 13 to 16, these wedges 65 and 66 abut end portions 67 and 68 respectively of the drive shoulders 51 and 52 respectively to restrain the cam from rotating in a clockwise direction while the stop itself is restrained from rotating clockwise by the stop abutting a first wall 69 of the offset recess.--

Page 15, amend the paragraph bridging pages 15 and 16 to read as follows:

A15
--Rotation of the barrel, as shown in Fig 9 to 12, in an anticlockwise direction from the locked configuration causes the pin extensions 57 to engage the wedges 65 and 66 to urge the stop 66A and annular member 63 to rotate in an anticlockwise direction but in so doing the

Amendment Under 37 C.F.R. § 1.111
USSN 09/883,131
Attorney Docket Q71763

AS
wedges 65 and 66 simultaneously engage the drive shoulders end portions 67 and 68 respectively to cause the cam to rotate in an anticlockwise direction, and in practice the whole cam assembly rotates substantially simultaneously and the same amount in an anticlockwise direction until the stop 66A engages the opposite wall 70 of the offset recess; this latter configuration corresponding to the unlocked position of the cam.--

Page 16, amend the last paragraph to read as follows:

AB
--In a padlock having a cylinder the pin sub-assembly 59 is configured such that, when the pin extensions 58 protrude towards the cam they protrude into the drive recesses 48 and 49 but they do not protrude far enough to engage in the additional recesses 73 - this configuration corresponding to a Type 1 padlock. In a Type 1 padlock, when the cam is in the unlocked position and the shackle peripheral recess is engaged with 30 the second ball the second ball being in the second unlocking recess in the cam prevents the cam from angularly displacing but because of the free spaces between the drive pins and drive shoulders the barrel and attached drive pins can be rotated to the key withdrawal position. Preferably, the Type 1 padlock includes a compression spring 18A supported in the longer recess 18 and employed to outwardly bias the longer shackle leg. It has a free length requiring it to be compressed when the shackle is inserted in the casing.--

Page 17, amend the second paragraph to read as follows:

A7
--By simply changing the orientation of the pin sub-assembly, the padlock can be reconfigured between a Type 1 and Type 2 padlock.--